

REMARKS

The Applicant appreciates the courteous and complete examination of the application by the Examiner. In view of the foregoing amendments and the following remarks, a reconsideration of the instant application is respectfully requested.

In order to expedite the prosecution of this application, claims 13, 15, 22, 25 and 32 have been amended to overcome the Examiner's rejections and to completely cover certain aspects of the Applicant's invention. Claims 13-32 are now in this application.

Regarding the Specification

The Examiner objected to the disclosure for informalities. Particularly page 17, line 5 which reads "small apertures 30" but having no reference number "30" labeled in the drawings. The Applicant respectfully submits a replacement drawing sheet 11 containing Figure 11 which includes a reference number "30" added therein.

Additionally, the Examiner objected to page 18, line 9 (paragraph 0050) for informalities. A replacement paragraph 0050 has been submitted which corrects the informality by amending "retaining ring 33" to read as "retaining ring 31", as requested by the Examiner.

Regarding the Claim Objections

The Examiner objected to claim 32 for informalities. Claim 32 has been amended to correct the misspelling of "treaded" to "threaded".

Regarding the Drawings

The Examiner objected to Figure 1 because the reference number "7" for the "sealing washer" points to the "flow restriction plate 6" element. A replacement drawing sheet 1 containing Figure 1 is submitted herewith which includes reference number "7" pointing to the correct element, as per the other figures.

The Examiner objected to Figure 4 because reference numbers "5" and "7" on the lower drawings should be changed to "9" and "8". A replacement drawing sheet 4

containing Figure 4 is submitted herewith which changes reference number “5” to “9” and “7” to “8”.

The Examiner objected to Figure 9 because reference number “27” should be changed to “26”. A replacement drawing sheet 9 containing Figure 9 is submitted herewith which changes reference number “27” to “26”.

Regarding the Claim 102(b) Rejections

The Examiner rejected claims 13-19 and 21 under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 03012249 to Enoki (Enoki). The Applicant appreciates the time the Examiner spent on locating the prior art references relied upon in the above-identified Office Action.

Independent claim 13 has been amended to include the limitations of claims 15 and 22. The Enoki reference does not disclose, teach or suggest the use of a “diaphragm valve” located in the second flow path. The Enoki reference discloses spring (15) biased piston (13), which substantially different in structure than the claimed diaphragm valve. Furthermore, the Enoki reference does not disclose, teach or suggest the inlet (1) and outlet (3b, 4b) orifices being coaxial with the first flow path (4) and second flow path (8). The inlet (1) of the Enoki reference is perpendicular to the outlet orifice, and the first and second flow paths. It can be appreciated then that amended claim 13 contains substantial structural differences over the Enoki reference, and is therefore believed to be patentably distinct therefrom. It is believed that amended claim 13 is no longer anticipated by the Enoki reference since the Enoki reference does not describe or disclose the above-identified structural elements.

The Applicant requests that the Examiner reconsiders his rejections of the invention in view of the well established principle that small differences in a crowded art can constitute patentable improvement. See *In re Baum*, 51 USPQ 470 (CCPA 1941) and *In re Lange*, 126 USPQ 365 (CCPA 1960). In considering this principle, the Applicant would also request that the Examiner take note to the court decision which notes that “apparent simplicity has been held to furnish strong argument for patentability where, as here, a need has existed for a structure of the nature disclosed and claimed.

The fact that a solution to a problem is simple, or appears to be simple when viewed in retrospect, does not mean that the solution was obvious when it was conceived." See *Ellipse corp. v. Ford Motor Co.*, 171 USPQ 513.

Claim 15 has been amended to include the structural limitations of claim 25 which are not disclosed, taught or suggested by the Enoki reference. Particularly, the Enoki reference does not disclose, teach or suggest a housing ring, a cylindrical body member with an increase diameter section located in a recess of the housing ring, a flow restriction plate, and a sealing washer.

Claim 22 has been amended to include the structural limitations from the specification, support of which being found in paragraph 0048 of the present application. Particularly, the Enoki reference does not disclose, teach or suggest a retaining ring positioned in the second flow path, where the retaining ring retains the diaphragm valve in the cylindrical body.

Claims 14-19 and 21 are felt to patentably distinguish over the prior art references because of their above-mentioned dependency from amended claim 13.

Additionally, the Examiner rejected claims 25, 26 and 30 under 35 U.S.C. 102(b) as being anticipated US Patent 4,275,843 to Moen (Moen). The Examiner states that the increased diameter section (16) of the cylindrical body member (12) is located within the recess of the housing ring (28). The Applicant respectfully believes that the Examiner is in error in the interpretation of the Moen reference. It can clearly be seen in Figs. 1 and 2 of the Moen reference that the cylindrical body member 12 and the increased diameter section (16) are not located within the recess of the housing ring (28). The increased diameter section (16) is positioned on the exterior surface of the ball or swivel member (28). Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose the claimed limitation.

Furthermore, the Examiner states that the Moen reference discloses that the cylindrical body member (12) defines the inner (through 54 and 64) flow path and the outer (through outer edges of 66 and 68) flow path. The Moen reference does not disclose a second flow path featuring a valve therein, as in claim 25 of the present

application. The flow path (66, 68) is not a separate and concentric flow path with the first flow path (54, 64), as shown in Figs. 1 and 2 of the Moen reference. The grooves (68) extend toward and are in communication with flow path (54, 64) (col. 2, lines 44-55), wherein the screw (60) controls the flow of the inner flow path (54, 64) and not the outer flow path, as in amended claim 25. Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose the concentric inner and outer flow paths with the valve located in the inner flow path.

Additionally, the Examiner states that the flow restriction plate (34) is installed adjacent the increase diameter section (16). It can clearly be seen in Figs. 1 and 2 of the Moen reference that the flow restriction plate (34) is located in the recess of the ball member (28) while the increase diameter section (16) is located outside the ball member and not adjacent the flow restriction plate (24). Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose the claimed limitation.

The Examiner also states that the sealing washer (30) is compressed "between" the cylindrical body member (12), the restriction plate (34), and the fluid source. As illustrated in Figs. 1 and 2 of the Moen reference, it can clearly be seen that the sealing washer (30) is not compressed "between" the elements as described in amended claim 25. The sealing washer (30) of the Moen reference is positioned on the exterior of the ball (28) and the interior of the cylindrical body member (28), and is supported by an outwardly-extending flange (44) of a cup-shaped retainer (42). The increased diameter section (16) is not positioned between and is not in contact with the sealing washer (30), as in amended claim 25. Additionally, the restriction plate (38) is not in contact with the sealing washer since it is located in the recess and the sealing washer (30) is not. Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose these claimed limitations.

Lastly, claim 25 has been amended to include the limitation of that the operation of the valve member is controlled by the flow of fluid along the outer flow path. The

Moen reference does not disclose a valve controlled by the flow of fluid and which can prevent the flow of the inner flow path since the screw (60) since “there can never be a total shutoff of water flow” (col. 2, line 53), and that there are only one flow path in the Moen reference.

Claims 26 and 30 are felt to patentably distinguish over the prior art references because of their above-mentioned dependency from amended claim 25.

Regarding the Claim 103(a) Rejections

The Examiner rejected claims 20 and 24 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 03012249 to Enoki (Enoki). The Examiner states that the Enoki reference “does not disclose an aerator arrangement” and that the “use of an aerator arrangement to improve similar devices in the same way would yield predictable results.”

The Applicant respectfully believes that it would not have been obvious to one skilled in the art to use an aerator in only the “second flow path” and not the first flow path, as in claim 20. The aerator in claim 20 is structurally different to known aerators since it is positioned in the second flow path and not the entire outlet orifice. The second flow path flows through the aerator and then into the outlet orifice. Additionally, since claim 20 depends upon amended claim 13 which now includes subject matter not disclosed, taught or suggested by the Enoki reference, then claim 20 is believed to be patentably distinct from the Enoki reference.

Claim 24 is felt to patentably distinguish over the prior art references because of its above-mentioned dependency from amended claim 13.

The Examiner rejected claims 22 and 23 under 35 U.S.C. 103(a) as being unpatentable over Enoki in view of US Patent 5,439,143 to Brown et al. (Brown et al.).

Claim 22 has been amended to remove the original limitations, which have been amended into independent claim 12, and replaced with limitations from the specification (paragraphs 0048 and 0050) which are not disclosed in the Enoki or the Brown references. Amended claim 22 describes a retaining ring positioned in the “second flow path” which holds the diaphragm valve in place.

Claim 23 is felt to patentably distinguish over the prior art references because of its above-mentioned dependency from amended claim 22.

The Examiner rejected claim 27 under 35 U.S.C. 103(a) as being unpatentable over Moen. The Examiner states that the Moen reference “does not disclose an O-ring and a taper cone arrangement for the restriction plate”, and that “it would have been obvious to one of ordinary skill in the art ... to substitute the restriction plate 34 having an array of holes 38 with the flow restriction plate having an O-ring and taper cone arrangement.” Since the Moen reference does not disclose, teach or suggest the use of an O-ring and taper cone restriction plate, and there are no other references discloses such an arrangement, then the Applicant respectfully believes the Examiner does not have proper motivation or support for *prima facie* obviousness rejection.

However, as the Supreme Court recently explained “a patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S., 82 U.S.P.Q.2d 1385, 1396 (2007). Moreover, “[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.* (citing *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006). “To facilitate review, this analysis should be made explicit.” *Id.* Furthermore, “[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. See *Graham*, 383 U. S., at 36 (warning against a ‘temptation to read into the prior art the teachings of the invention in issue’ and instructing courts to ‘guard against slipping into the use of hindsight’ (quoting *Monroe Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F. 2d 406, 412 (CA6 1964))).” *Id.* at, 82 U.S.P.Q.2d at 1397. In certain circumstances, it may also be important to include explicit findings as to how a person of ordinary skill would have understood prior art teachings, or what a person of ordinary skill would have known or could have done. Factual findings made by Office personnel are the necessary underpinnings to establish obviousness. Once the findings of fact are articulated, Office

personnel must provide an explanation to support an obviousness rejection under 35 U.S.C. 103.

Additionally, the claimed O-ring and taper cone arrangement is installed adjacent the increase diameter section of the cylindrical body, see amended claim 25 of the present invention, and the restriction plate (36) of the Moen reference is located in the ball (28). Claim 27 is felt to patentably distinguish over the prior art references because of its above-mentioned dependency from amended claim 25.

The Examiner rejected claim 31 under 35 U.S.C. 103(a) as being unpatentable over Moen. The Examiner states that the Moen reference "does not teach a parallel plate located after the spray jets with a mesh screen and an array of holes on the same matrix as the spray jets", and that "it would have been obvious to one of ordinary skill in the art ... to incorporate a mesh screen at the outlet of Moen in order to remove particulates from the fluid and soften the outlet flow." The Examiner makes no reference to the specific claimed structure of the mesh being located on "a parallel plate". Since the Moen reference does not disclose, teach or suggest the use of a parallel plate featuring a mesh screen and an array of holes aligned with the spray jets, and there are no other references discloses such an assembly, then the Applicant respectfully believes the Examiner does not have proper motivation or support for *prima facie* obviousness rejection.

Claim 31 is felt to patentably distinguish over the prior art references because of its above-mentioned dependency from amended claim 25.

The Examiner rejected claims 28-30 under 35 U.S.C. 103(a) as being unpatentable over Moen in view of Brown et al. Claims 28-30 are felt to patentably distinguish over the prior art references because of their above-mentioned dependency from amended claim 25 (see arguments of patentability for claim 25 above).

The Examiner rejected 32 under 35 U.S.C. 103(a) as being unpatentable over Moen in view of Brown et al. as applied to claims 25, 28 and 29, and further in view of the rejection made of claim 31. The Examiner states that the increased diameter

section (16) of the cylindrical body member (12) is located within the recess of the housing ring (28). The Applicant respectfully believes that the Examiner is in error in the interpretation of the Moen reference. It can clearly be seen in Figs. 1 and 2 of the Moen reference that the cylindrical body member 12 and the increased diameter section (16) are not located within the recess of the housing ring (28). The increased diameter section (16) is positioned on the exterior surface of the ball or swivel member (28). Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose the claimed limitation.

Furthermore, the Examiner states that the Moen reference discloses that the cylindrical body member (12) defines the inner (through 54 and 64) flow path and the outer (through outer edges of 66 and 68) flow path. The Moen reference does not disclose a second flow path featuring a valve therein, as in amended claim 32 of the present application. The flow path (66, 68) is not a separate and concentric flow path with the first flow path (54, 64), as shown in Figs. 1 and 2 of the Moen reference. The grooves (68) extend toward and are in communication with flow path (54, 64) (col. 2, lines 44-55), wherein the screw (60) controls the flow of the inner flow path (54, 64) and not the outer flow path, as in amended claim 32. Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose the concentric inner and outer flow paths with the valve located in the inner flow path.

Additionally, the Examiner states that the flow restriction plate (34) is installed adjacent the increase diameter section (16). It can clearly be seen in Figs. 1 and 2 of the Moen reference that the flow restriction plate (34) is located in the recess of the ball member (28) while the increase diameter section (16) is located outside the ball member and not adjacent the flow restriction plate (24). Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose the claimed limitation.

The Examiner also states that the sealing washer (30) is compressed "between" the cylindrical body member (12), the restriction plate (34), and the fluid source. As

illustrated in Figs. 1 and 2 of the Moen reference, it can clearly be seen that the sealing washer (30) is not compressed “between” the elements as described in amended claim 25. The sealing washer (30) of the Moen reference is positioned on the exterior of the ball (28) and the interior of the cylindrical body member (28), and is supported by an outwardly-extending flange (44) of a cup-shaped retainer (42). The increased diameter section (16) is not positioned between and is not in contact with the sealing washer (30), as in amended claim 32. Additionally, the restriction plate (38) is not in contact with the sealing washer since it is located in the recess and the sealing washer (30) is not. Therefore this claimed limitation is substantially different in structure to that disclosed in the Moen reference, and is thereby believed to not be a proper rejection since the Moen reference does not disclose these claimed limitations.

Lastly, claim 32 has been amended to include “a retaining ring positioned in said inner flow path and being adapted to retain said diaphragm valve in position”. The retaining has “a flat surface positioned below said flow restriction plate adapted to diffuse fluid flow from said restriction plate”. This structural limitation is substantially different and patentably distinct from the prior art references.

Conclusion

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicant reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

Applicant has endeavored to address all of the Examiner’s concerns as expressed in the Office Action. Accordingly, amendments to the claims, the reasons

therefor, and arguments in support of patentability of the pending claim set are presented above. Any claim amendments which are not specifically discussed in the above-remarks are made in order to improve the clarity of claim language, to correct grammatical mistakes or ambiguities, and to otherwise improve the clarity of the claims to particularly and distinctly point out the invention to those of skill in the art. Finally, Applicant submits that the claim limitations above represent only illustrative distinctions. Hence, there may be other patentable features that distinguish the claimed invention from the prior art.

With the above amendments being fully responsive to all outstanding rejections and formal requirements, it is respectfully submitted that the claims are now in condition for allowance, and a notice to that effect is earnestly solicited. Should the Examiner feel that there are further issues which might be resolved by means of telephone interview, the Examiner is cordially invited to telephone the undersigned at (403) 444-5695, or email at davidguerra@internationalpatentgroup.com

No additional fee is due.

Respectfully Submitted,

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